

Requirement 4.5-2 Critical Surface Data

Payload	Orientation	Critical Surface	Critical Surface Density (g/cm ²)	Surface Area (m ²)	Unit Vector X	Unit Vector Y	Unit Vector Z	Pressurized (y/n)	Outer Wall	Outer Wall Density (g/cm ²)	Outer Wall Separation (cm)
GRATTIS	Fixed Oriented	Tank_+X	2.7	0.007793	0	1	0	y	Al_wall	2.7	0.6858
GRATTIS	Fixed Oriented	Tank_-X	2.7	0.00661	0	-1	0	y	Al_wall	2.7	0.6858
GRATTIS	Fixed Oriented	Tank_-X_Behind Plate	1.39	0.001183	0	-1	0	y	Plate	0.857	3.6858
GRATTIS	Fixed Oriented	Tank_+Y	1.9456	0.009661	-1	0	0	y	Al_wall	1.9456	0.6858
GRATTIS	Fixed Oriented	Tank_-Y	1.9456	0.000691	1	0	0	y	Al_wall	1.9456	0.6858
GRATTIS	Fixed Oriented	Tank_-Y_Behind Plate	1.9456	0.008717	1	0	0	y	Plate	0.857	3.6858
GRATTIS	Fixed Oriented	Tank_+Z	1.9456	0.006568	0	0	1	y	Al_wall	1.9456	0.6858
GRATTIS	Fixed Oriented	Tank_+Z_Behind Plate	1.9456	0.041656	0	0	1	y	Plate	0.857	1.1858
GRATTIS	Fixed Oriented	Tank_-Z	1.9456	0.006568	0	0	-1	y	Al_wall	1.9456	0.6858
GRATTIS	Fixed Oriented	Tank_-Z_Behind Plate	1.9456	0.054487	0	0	-1	y	Plate	0.857	3.6858
GRATTIS	Fixed Oriented	Battery	1.08	0.04116	-1	0	0	y	Wall_Battery	0.536	0.4
GRATTIS	Fixed Oriented	Battery	1.08	0.04116	-1	0	0	y	Wall_Aluminum	2.7	0.16
GRATTIS	Fixed Oriented	Battery	1.08	0.04116	-1	0	0	y	ABS_Panel	1.04	0.1